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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

OMOSEWO, OLUBUSOLA

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2168

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/668,949	Applicant(s) AHMED ET AL.	
	Examiner OLUBUSOLA OMOSEWO	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claim 15 has been amended. Claims 29-55 has been withdrawn.
2. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-3, 5-17 and 19-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Dellarocas et al. (Patent No. 7, 017,146) as applied to claim 1 above, and further in view of Gloudeman et al. (Patent No. 6,141,595) "hereinafter Gloudeman"

For claims 1 and 15, Dellarocas teaches "a system for a building system application comprising: a database"(Fig. 8);"an application infrastructure, the infrastructure comprising:

"a system design converter for converting application definition data into computer statements for implementing control logic of application definition data" ([Fig. 4, Col. 10, lines 4-29, Col. 30, lines 13-26]) wherein a file name is viewed in response to the code number input to the file view application(system design converter)"a computer tool interface coupled to the system design converter, the computer tool interface providing the system design converter with data from the database through the data provider interface" ([Fig. 8, Col. 17, lines 21-51] wherein the resource could include other resource produced by other applications such as a database. however, the resources entities have ports (computer tools) through which they are connected to the rest of the system and data could flow through the ports)

an external program module interface coupled to the system design converter, the external program module interface providing the system design converter with external program modules([Fig. 8, Col. 17, lines 21-51] the port connect the resource database to the rest of the system and data flows through the ports) and the system design converter includes data obtained through the computer tool interface and external program modules obtained through the external program module interface with the computer statements for implementing control logic of application definition data to generate a building system application" ([Fig. 4, Col. 17, lines 21-51] the resource have port through which they are connected to the rest of the system, however, data flows through the port(computer tool) [Col. 10, lines 4-29], outputting a file name(computer statement) in response to the code input by a user)

Dellarocas does not explicitly teach "a data provider interface for converting between a common database access method and a database application programming interface (API)"

However, Gloudeman teaches "a data provider interface for converting between a common database access method and a database application programming interface (API)" (Col. 5, lines 1-48, Fig. 2)

Therefore it would have been obvious to one of ordinary skill in the art to modify Dellarocas with Gloudeman's teachings of a third party interface, which is been connected to the building system interface and the systems database API. However, the third party interface (data provider) includes the necessary protocol converters and data migration tools which is attached to the building automation system.

For claim 2, Dellarocas does not explicitly teach "wherein the database is comprised of a plurality of databases".

However, Gloudeman teaches "wherein the database is comprised of a plurality of databases" (Col.5, lines 10-19)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Dellarocas's teachings with Gloudeman's teachings of database comprising real-time database and building automation system, which maintains a wide variety of different data stores and allows the system to generate a wide variety of different informational reports, flexible querying and data analysis.

For claim 3, Dellarocas does not explicitly teach "the database being comprised of a real-time database and a data mart".

However, Gloudeman teaches "the database being comprised of a real-time database and a data mart" (Col. 5, lines 20-26, fig. 2).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Dellarocas's teachings with Gloudeman's teachings of database comprising real-time database and building automation system, which maintains a wide variety of different data stores and allows the system to generate a wide variety of different informational reports, flexible querying and data analysis.

For claim 5, Dellarocas teaches "external program module interface further comprising: common components for application support" (Col. 10, lines 41-54, Col. 17, lines 21-51, Fig. 8]Software components)

For claim 6, Dellarocas teaches "Web-based components for coupling the computer statement for implementing the control logic of the application definition data to another application over the Internet" ([Col. 30, lines 27-49]).

For claim 7, Dellarocas teaches "operating system communication components for coupling the computer statements for implementing the control logic of the application definition data to another application through an operating system" ([Col. 30, lines 27-49]).

For claim 8, Dellarocas teaches "wherein the operating system communication components communicated through a Windows operating system" ([Col. 12, lines 41-65, Col. 30, lines 27-49]).

For claim 9, Dellarocas teaches "wherein the Web-based components couple the computer statements for implementing the control logic of the application definition data to another application over the Internet through a customer web portal" ([Col. 30, lines 27-49]).

For claim 10, Dellarocas teaches "a configuration utility for developing a file structure representative of a building system and for associating configuration data with components identified in the file structure" (Col. 17, lines 21-51).

For claim 11, Dellarocas teaches "a data collector interface for coupling external data sources to the database" ([Col. 17, lines 21-51]).

For claim 12, Dellarocas teaches "wherein the data collector interface converts data from the native format for an external data source to one that is compatible with the database structure" (Col. 4, lines 58-Col. 5, lines 9).

For claim 13, Dellarocas teaches "transaction services for generating instructions for the database API to store the converted data in the database" (Col. 4, lines 58-Col. 5, lines 9, Col.5, lines 39-60).

For claim 14, Dellarocas does not explicitly teach "a scheduling service for activating the data collector interface to interrogate the external data sources for data to be stored in the database".

However, Gloudeman teaches "a scheduling service for activating the data collector interface to interrogate the external data sources for data to be stored in the database" ([Col. 5, lines 35-61]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dellarocas's teachings with Gloudeman's teachings of the optimization application which periodically or continuously executes to adjust the systems operating attributes to achieve improved system performance and also to update the attributes stored in the building system data store 70. wherein, in other for the optimization application to be able to perform any updates periodically or continuously, the third party systems connected to the building system interface, will have to be activated in order for the building system interface layer to receive new data and the system database API layer to be able to access and populate the data store with new data.

For claims 16, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 2 and is similarly rejected.

For claim 17, Gloudeman teaches "wherein the storing of data in the database includes storing the data in one of a real-time database and a data mart (Col. 5, lines 20-26, fig. 2).

For claim 19, Dellarocas teaches "coupling common components to the computer statements for implementing control logic of application definition data for communication support" ([Col. 10, lines 4-29, Col. 10, lines 41-54]).

For claim 20, Gloudeman teaches "coupling the computer statements for implementing control logic of application definition data to another application through a Web-based component for communication over the Internet" (Col. 4, lines 12-24).

For claim 21, Dellarocas teaches "coupling the computer statements for implementing control logic of application definition data to another application through an operating system communication component for supporting application communication through the operating system" ([Col. 30, lines 27-49]).

For claim 22, Dellarocas teaches "wherein the operating system common component coupling includes coupling a Windows-based communication component to the computer statements for implementing control logic of application definition data"([Col. 12, lines 41-65, Col. 30, lines 27-49]).

For claims 23, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 9 and is similarly rejected.

For claims 24, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 10 and is similarly rejected.

For claims 25-27, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 11-13 and are similarly rejected.

For claim 28, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 14 and is similarly rejected.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dellarocas et al. (Patent No. 7, 017,146) in view of Gloudeman et al. (Patent No. 6,141, 595), further in the view of Bakalash et al. (Pub No. 2003/0229652) hereinafter "Bakalash".

For claims 4 and 18, Dellarocas and Gloudeman do not explicitly teaches "the data mart being configured in one of a snowflake and star data organization".

However, Bakalash teaches "the data mart being configured in one of a snowflake and star data organization" (see paragraph [0059-0060], [0073], fig. 18A&B)).

It would have been obvious to one of ordinary skill in the art the time of the invention to combine Dellarocas's teachings and Gloudeman's teachings of database been comprised of real-time database with Bakalash's teachings of database being configured in a star schema, wherein datamart could also be a database, star schema and summary tables are also a means of storing data based on a set of know database and database dimension. Wherein the summary tables are in essence additional fact tables and they are attached to the basic fact table creating a snowflakes extension of the star schema. Star schema is well known in the art for organizing data, wherein real-time data store is a fast and effective way of retrieving data. Therefore combining Dellarocas and Gloudeman's teachings with Backlash will enhance retrieving of building system data, faster when demanded by the user.

Response to Argument

7. Applicant's argument with respect to claims 1, 2, 4-13, 15-27 have been considered but are moot in view of new grounds of rejection.

As per claim 14 and 28, applicant's argument filed October 9, 2006 has been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

As per claim 14 and 28 applicant argued that Gloudeman does not teaches "a scheduling service for activating the data collector interface to interrogate the external data sources for data to be stored in the database". The applicant argued the Gloudeman does not teach the optimization layer operating to interrogate external systems through the third party interface. On the contrary Gloudeman teaches at Col. 5, lines 35-61, the optimization application which periodically or continuously executes to adjust the systems operating attributes to achieve improved system performance and also to update the attributes stored in the building system data store 70. However, in order for the optimization application to be able to perform any updates periodically or continuously, the third party systems connected to the building system interface, will have to be activated in order for the building system interface layer to receive new data and the system database API layer to be able to access and populate the data store with new data.

CONCLUSION

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUBUSOLA OMOSEWO whose telephone number is 571-272-2738. The examiner can normally be reached on Tuesday-Thursday from 10.00-6.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OLUBUSOLA OMOSEWO
Examiner
Art Unit 2168



TIM VO
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